

WHAT IS CLAIMED IS:

1. A method for reducing agglomeration of slurry particles in a slurry system drain, comprising:

conveying a waste slurry to the drain, the waste slurry forming an agglomerate in the drain and having an agglomerate particle size;

subjecting the waste slurry to energy emanating from an energy source; and

transferring energy from the energy source to the waste slurry to substantially reduce the agglomerate particle size.

2. The method as recited in Claim 1 further comprising sensing a absorbance of the waste slurry with a absorbance sensor coupled to the drain.

3. The method as recited in Claim 2 wherein subjecting includes cycling off the subjecting when the sensing discerns a nominal absorbance or less, and cycling on the subjecting when the sensing discerns greater than the nominal absorbance.

4. The method as recited in Claim 3 wherein sensing a nominal absorbance includes sensing a nominal absorbance of less

than about 0.5.

5. The method as recited in Claim 1 wherein transferring includes transferring heat energy to the waste slurry.

6. The method as recited in Claim 5 wherein transferring heat energy includes transferring heat energy with a heating coil.

7. The method as recited in Claim 5 wherein transferring heat energy includes transferring heat energy with hot water.

8. The method as recited in Claim 7 wherein transferring heat energy with hot water includes transferring heat energy with hot water by injection or by conduction.

9. The method as recited in Claim 1 wherein transferring includes transferring ultrasonic energy with an ultrasonic wave.

10. A system for reducing agglomerate particles of slurry in a drain, comprising:

a chemical/mechanical polishing apparatus;

a slurry source comprising a slurry and coupled to the chemical/mechanical polishing apparatus;

a slurry recovery system having a drain configured to receive waste slurry from the polishing apparatus, the waste slurry forming an agglomerate within the drain and having an agglomerate particle size; and

an energy source proximate the drain and configured to transfer energy to the waste slurry to substantially reduce the agglomerate particle size.

11. The system as recited in Claim 10 further comprising a absorbance sensor coupled to the drain and configured to discern a absorbance of the waste slurry.

12. The system as recited in Claim 10 wherein the energy source is a heat energy source.

13. The system as recited in Claim 12 wherein the heat energy source is a heating coil.

14. The system as recited in Claim 12 wherein the heat energy source is hot water.

15. The system as recited in Claim 14 wherein the hot water is a hot water injection device or a hot water jacket.

16. The system as recited in Claim 10 wherein the energy source is an ultrasonic transmitter.

17. A method of manufacturing an integrated circuit, comprising:

forming an active device on a semiconductor wafer;

forming a substrate over the active device;

polishing the substrate with a polishing tool using a polishing slurry thereby creating a waste slurry;

conveying the waste slurry to a drain, the waste slurry forming an agglomerate in the drain and having an agglomerate particle size;

subjecting the waste slurry to energy emanating from an energy source; and

transferring energy from the energy source to the waste slurry to substantially reduce the agglomerate particle size.

18. The method as recited in Claim 17 further comprising sensing a absorbance of the waste slurry with a absorbance sensor coupled to the drain.

19. The method as recited in Claim 18 wherein the subjecting includes cycling off the subjecting when the sensing discerns a nominal absorbance or less, and cycling on the subjecting when the sensing discerns greater than the nominal absorbance.

20. The method as recited in Claim 19 wherein sensing a nominal absorbance includes sensing a nominal absorbance of less than about 0.5.

21. The method as recited in Claim 17 wherein transferring includes transferring heat energy to the waste slurry with a heating coil or with hot water.

22. The method as recited in Claim 21 wherein transferring heat energy with hot water includes transferring heat energy with hot water by injection or by conduction.

23. The method as recited in Claim 17 wherein transferring includes transferring ultrasonic energy with an ultrasonic wave.

24. An integrated circuit as made by the method recited in Claim 17.

25. The integrated circuit as recited in Claim 24 wherein the integrated circuit includes a transistor selected from the group consisting of:

- a CMOS transistor,
- an NMOS transistor,

6 a PMOS transistor, and

7 a bipolar transistor.

26. The integrated circuit as recited in Claim 24 further  
2 comprising electrical interconnects formed within the integrated  
3 circuit.

27. The integrated circuit as recited in Claim 26 wherein the  
4 electrical interconnects include an electrical interconnect  
5 selected from the group consisting of:  
6

7 a contact plug,

8 a VIA, and

a trace.